

Application No. 10/822581
Page 7

Amendment
Attorney Docket No. S63.2B-10865-US01

Remarks

The specification has been amended to correct an obviously incomplete sentence.

Claims 1-13 and 30-44 are now pending. Claims 14-29 have been cancelled without prejudice in view of the restriction requirement and in confirmation of the prior election to prosecute the subject matter of claims 1-13 and 30. New claims 31-44 submitted herein have specific written description support in the cancelled claims. No new matter has been added.

Claim Rejections - 35 USC §112

Claim 1 has been rejected as indefinite for "the inner and outer layers." The term has been amended to conform to the antecedent "the first and second layers." Withdrawal of the rejection is therefore requested. Claim 1 has also been amended to insert an obviously missing preposition in line 8 thereof.

Claim Rejections - 35 USC §102

Claim 30 has been rejected as anticipated by Wang et al, US 5,195,969 or Samuelson et al, US 6,464,683. The rejection is traversed.

Claim 30 recites a tie layer that is a melt modified *product of one of the two different polymers* and a coupling agent that is reactive with at least the other of the two different polymers." The invention contemplates a bonding layer that desirably has an indistinct transition with one of the adjacent polymer layers due to like-polymer diffusion (see page 4, lines 6-9, page 4, lines 32-33, page 8, line 19; page 9, lines 14-17). To facilitate such diffusion, the bonding layer is made starting with the same polymer material as that layer.

The Office Action fails to show that the references show a melt modified product of one of the two different polymers.

Wang et al is cited for teaching a laminate having polyamide on one side, polyethylene on the other side and a layer of Plexar sandwiched in-between. This is true, but it does not follow that the same polymer as one of the two different adjacent polymers was used in making the Plexar material. In fact, the chances that they will be the same polymer are extremely small. This is particularly so since Plexar polymers come in several polymer structural grades, including modified LLDPE, modified HDPE, modified EVA [matweb - Plexar search, attached]. Further,

*Application No. 10/822581**Page 8**Amendment**Attorney Docket No. S63.2B-10865-US01*

amongst particular polymer structural grades there are many different physical property specifications.

Samuelson is cited for showing a laminate having an outer layer of polyester or polyamide, a core layer comprising a polyethylene and an intermediate tie layer comprising a polymeric material comprising a polymeric material capable of adhering the outer layer to the core layer, the polymer of the intermediate tie layer being a modified olefinic polymer having anhydric moiety or maleic acid. Again this is true but not sufficient to make out a *prima facie* case of anticipation. There is nothing in Samuelson indicating that the tie layer should be a modification product of one of the two different polymers used in the inner and core layers. For instance, while Table 1 shows a core layer of "polyethylene" and a tie layer of "functionalized polyethylene," there is no teaching to use the core layer polyethylene polymer to form the tie-layer. Polyethylene polymers, in particular, have a wide range of molecular weight and physical property specifications. In Samuelson, commercial materials are taught for both the core and tie-layer polymers so the chances that the polyethylene used to form the tie-layer polymer will have substantially matched the polyethylene used as the core polymer are insignificantly small.

The factual determination of anticipation requires the disclosure in a single reference of every element of the claimed invention. *In re Robertson*, 49 USPQ2d 1949 (Fed. Cir. 1999); *In re Lowry*, 32 USPQ2d 1031 (Fed. Cir. 1994); *Continental Can Co. USA Inc. v. Monsanto Co.*, 20 USPQ2d 1746 (Fed. Cir. 1991); *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990); *Diversitech Corp. v. Century Steps, Inc.*, 850 F.2d 675, 7 USPQ2d 1315 (Fed. Cir. 1988); *In re Marshall*, 578 F.2d 301, 198 USPQ 344 (CCPA 1978); *In re Arkley*, 455 F.2d 586, 172 USPQ 524 (CCPA 1972). Here there has been no showing that the tie layer is formed from one of the two different polymers between which it is sandwiched.

Therefore a *prima facie* case of anticipation has not been established. The rejection of claim 30 as anticipated under 35 USC §102 should be withdrawn.

New claims 31-44 depend from claim 30 and are seen to be patentable at least for the same reason that claim 30 is patentable.

Claim Rejections - 35 USC §103

Claims 1-13 have been rejected as obvious from Wang or Samuelson, either one taken

Application No. 10/822581
Page 9

Amendment
Attorney Docket No. S63.2B-10865-US01

with Shimura et al, US 5,441,488. Wang and Samuelson are relied upon as previously, Shimura et al is relied on for showing tie-layer polymers having maleic anhydride monomer contents above 5%. The rejection is traversed.

Claim 1 recites the tie layer is formed of a material obtained by melt modification of "one of the first or the second polymer materials." As has already been shown in connection with claim 30, Wang et al and Samuelson do not meet this recitation.

Shimura et al describes use of an acid-anhydride containing copolymer as a "matric" material or as an intermediate layer between a matric material and a water swellable lubricious polymer. The acid-anhydride containing polymer may comprise from 0.01 to 50 mole % acid-anhydride, based on the total monomer employed in forming the acid anhydride-containing polymer. This suggests that the acid-anhydride containing polymer is a direct polymerization product, not a melt modification product. However, even if Shimura et al were taken as suggesting a melt blend product of polymer and a coupling agent, it suffers the same deficiency that the Wang et al and Samuelson patents have, namely it does not teach that the polymer of one of the layers should be used in preparation of the tie layer.

A *prima facie* case of obviousness has not been made out in the Office Action. Therefore withdrawal of the rejection of claims 1-13 is respectfully requested.

Respectfully submitted,

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